



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/641,045	08/17/2000	Kenneth Lee Harper	9209-3	4757

20792 7590 03/30/2004

MYERS BIGEL SIBLEY & SAJOVEC
PO BOX 37428
RALEIGH, NC 27627

EXAMINER

PARTON, KEVIN S

ART UNIT	PAPER NUMBER
----------	--------------

2153

DATE MAILED: 03/30/2004

/0

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.		Applicant(s)	
	09/641,045		HARPER, KENNETH LEE	
	Examiner		Art Unit	
	Kevin Parton		2153	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02/10/2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-49 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 16-21, 35 and 36 is/are rejected.
- 7) ☒ Claim(s) 3-15, 22-34 and 37-49 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.

Response to Arguments

2. Applicant's arguments filed 02/10/2004 regarding claims 1, 20, and 35 have been fully considered but they are not persuasive. Please see the following reasons and the associated grounds of rejection below.

3. Regarding claims 1, 20, and 35, the applicant argues "merely because the packets monitored in Dawson are directed to a source does not mean Dawson teaches the monitoring recitations of claim 1" (page 2, paragraph 3). The examiner still contends that the system of Dawson (USPN 5,390,188) teaches the determination of a point of loss for packets between a source and a destination. Both source and target metrics can be calculated. Further, in the case that an individual packet is being tested, it would clearly be between a single source and a single destination. The reference still reads on the claims as written.

4. The applicant further argues that "determining a topology of a network between a particular source and destination makes no sense in the ring context of Dawson" (page 3, paragraph 1). The argument is not persuasive because it is very important to the function of Dawson that each node knows what nodes are upstream and downstream and the topology of the network. Further, in the applicant's specification page 12, paragraph 2, the topology "determination" is described. The topology data may simply be provided to the data processing system. This is analogous to the system of Dawson (USPN 5,390,188) where the topology is

either known or provided to the nodes so they know their position in the network. In this passage, determining a network topology makes no sense in the context of the claimed invention because the topology data is known and provided to the system with no determination process. Further, the specification goes on the same paragraph to point out that “the benefits of the present invention may be realized using such topology information regardless of how it is obtained.”

5. The applicant further argues “given the ring architecture of Dawson, there was simply no impetus to modify Dawson to arrive at the recitations of Claim 1 relating to monitoring data records” (page 3, paragraph 2). Please note that the rejection does not modify the system of Dawson (USPN 5,390,188), the system of Dawson (USPN 5,390,188) anticipates the current claims because it teaches the determination of a point of loss between a source and a destination.

6. The applicant further argues “such a loss calculation is not even in part based on the topology of the ring network” (page 3, paragraph 3). The argument is not persuasive because in the system of Dawson (USPN 5,390,188), the point of loss is determined at an individual node because of the fact that the ring topology is known. Since there is only one path due to the topology, the point of loss can be determined on a per packet or larger basis. Further, any node may be a source or destination so determining metrics for either is possible.

7. All further arguments are moot in view of the new grounds of rejection below.

Allowable Subject Matter

8. Claims 3-15, 22-34, and 37-49 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 2, 16-21, 35, and 36 are rejected under 35 U.S.C. 102(b) as being anticipated by Dawson (USPN 5,390,188).

3. Regarding claims 1, 20, and 35, Dawson (USPN 5,390,188) teaches a system for determining a point of loss for records to be communicated between a source and a destination on a communications network with means for:

- a. Determining a topology of the communication network between the source and the destination, the topology including a plurality of connecting nodes (figure 1). Note that in the reference, the topology is known by all nodes.
- b. Monitoring a number of data records from the source directed to the destination passing between ones of the connecting nodes during a determined period of time (column 10, lines 1-13; column 14, lines 58-62).
- c. Identifying at least one of the connecting nodes as the point of loss based on the monitored number of data records and the determined topology (column 10, lines 1-13; column 14, lines 58-62).

4. Regarding claims 2, 21, and 36 Dawson (USPN 5,390,188) teaches all the limitations as applied to claims 1, 20 and 35, respectively. He further teaches means wherein a plurality of network appliances configured to obtain a number of data records passing between a pair of

Art Unit: 2153

connecting nodes during a time period are positioned between respective ones of the connecting nodes, with means for:

- a. Identifying at least one of the network appliances on the topology (figure 7; column 14, lines 58-62).
- b. Obtaining the number of data records from the source directed to the destination obtained by the identified at least one network appliance during the determined period of time (column 14, lines 58-62; column 15, lines 35-38). Note that in the reference, the loss metrics are sent to management machines for each device.

5. Regarding claim 16, Dawson (USPN 5,390,188) teaches a system for determining point of loss for data records to be communicated between a source and a destination on a communication network comprising:

- a. A memory including a topology of the communication network between the source and the destination, the topology including a plurality of connecting nodes (figure 1). Note that in the reference, the topology is known by all nodes.
- b. A receiver that receives from a plurality of network appliances at determined locations on the communication network a number of data records from the source directed to the destination passing between ones of the connecting nodes during a determined period of time (column 10, lines 1-13; column 14, lines 58-62).

Art Unit: 2153

- c. A comparison circuit that identifies at least one of the connecting nodes as the point of loss based on the received number of data records, the locations of the network appliances and the topology (column 10, lines 1-13, 26-32).

6. Regarding claim 17, Dawson (USPN 5,390,188) teaches all the limitations as applied to claim 16. He further teaches means wherein pairs of the connecting nodes define segments of the topology between the source and the destination and wherein at least one of the network appliances is coupled between each of the pairs of the connecting nodes (figure 1; figure 9).

7. Regarding claim 18, Dawson (USPN 5,390,188) teaches all the limitations as applied to claim 17. He further teaches:

- a. A timer (column 14, lines 58-62).
- b. A filter that identifies ones of a plurality of data records detected by the at least one of the network appliances that are being transmitted from the source to the destination on the communications network (column 10, lines 1-13).
- c. A counter that counts filtered one of the plurality of data records, the counter being configured to be reset responsive to the timer; and a transmitter that transmits counts from the counter to the receiver (column 14, lines 58-62; column 15, lines 35-47)

8. Regarding claim 19, Dawson (USPN 5,390,188) teaches all the limitations as applied to claim 17. He further teaches means wherein the filter is configured to identify ones of the plurality of data records based on the source Internet Protocol (IP) address and destination IP address of a data packet containing data records detected by the at least one of the network

Art Unit: 2153

appliances (figure 1, figure 9; column 10, lines 1-13). Note that all packets are filtered based on the destination address.

Conclusion

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin Parton whose telephone number is (703)306-0543. The examiner can normally be reached on M-F 8:00AM - 4:30PM.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenton Burgess can be reached on (703)305-4792. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2153

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kevin Parton
Examiner
Art Unit 2153

ksp



GLENTON B. BURGESS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100